ABSTRACT OF THE DISCLOSURE

A three-dimensional periodical structure whose period is about 1 μm or smaller is provided. At least two kinds of films which have two-dimensionally substantially periodical projections are successively formed in layers substantially periodical to construct structure which is substantially three-dimensionally periodical. For instance, the films are made of materials different in refractive index. The three-dimensional periodical structure whose period is about 1 μm or smaller can be obtained by a simple fabricating method. By this structure, the propagation of a wave with a specific wavelength in many solid angular directions including several axial directions parallel to the plane and the thickness direction of the layers can be cut off.